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EC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/609,670	07/03/2000	Howard O. Menlove	09125-37382 (S 91,711)	3254

7590 12/14/2001

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EXAMINER

HANIG, RICHARD E

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 12/14/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

	Application No.	Applicant(s)
	09/609,670	MENLOVE ET AL.
Examiner	Art Unit	
Richard Hanig	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4, 8, 9 and 11-15 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

<ol style="list-style-type: none"> <li>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3)<input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ .</li> </ol>	<ol style="list-style-type: none"> <li>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) ____ .</li> <li>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6)<input type="checkbox"/> Other: _____</li> </ol>
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### **DETAILED ACTION**

1. The disclosure is objected to because of the following informalities: On page 8, last line item 35 is not shown. Claim 5 has a typing error and should refer back to claim --4--.

Appropriate correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 8, 9, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menlove et al (Los Alamos National Laboratory LA-13333-MS( excerpt-page 9)). For claims 1-4, 13, 14, 15, Menlove et al in a neutron monitoring system for waste material disclose on page 9, section B, a detector with an anticoincidence means to reject cosmic rays and also uses a coincidence gate (128  $\mu$ s) in measuring neutrons. The cosmic rays create spallation neutrons but the electronics of the detection system is gated off for 128  $\mu$ s and this shut off of the electronics system would be equivalent to the applicants veto means. It is noted that the reference does not recommend the technique under certain circumstances but the inventive concept is revealed. The length of time the vetoing is in effect is a design choice depending on the cosmic ray background and neutron source strength. Claims 8, 9, 11, have the detector grouped in pods and have a plurality of vetoing means, this is a design choice depending on the size and geometry of the sample. For claims 12, having shielding for external source of neutrons is a design choice used to improve signal to background measurements.

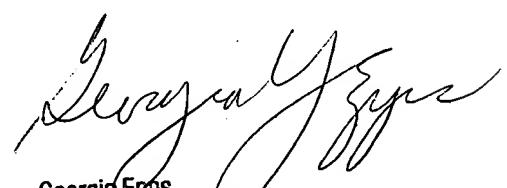
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4. Claims 5-7, 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: For claims 5-7, in the claimed radioactive detection system using a specific electronic circuit with a pulse generator or the use of a software program in the vetoing means is not shown or suggested in the prior art. For claim 10, in the claimed radioactive detection system using a vetoing system for pods adjacent to a pod which had a detector that produced a pulse is not shown or suggested.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Hanig whose telephone number is 703-308-4853. The examiner can normally be reached on M-F: 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703-308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*RH*  
December 10, 2001



Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800